Preface

The fabrication of a definitively wide range of products requires the shaping of metals. This simple statement justifies why the scientific community working on metal forming is enlarging every year all over the world.

In the last years Metal Forming Conference series has became a referring point both for researchers and industries, a forum in which ideas and innovative approaches are shared. The wideness of the considered topics has determined an always growing interest in the Conference.

This volume of Key Engineering Materials contains the papers presented at the 15th Metal Forming International Conferences, which was held in Palermo, Italy on September 21-24. This conference was the 15th in a series started in 1974 by the Akademia Górnico-Hutnicza in Kraków. From 1994 to 2010 the Conference was organized biennially, jointly with the University of Birmingham in United Kingdom. In 2010 the latter was replaced, as co-organizer, by University of Toyohashi (Japan). In 2012 Metal Forming Conference was organized again in Krakow by the Akademia Górnico-Hutnicza; in such occasion for the first time the organization team, made also by University of Toyohashi, was completed by University of Palermo (Italy). After the 2014 edition of the Conference organized in Palermo, the conference will take place again in Krakow, Poland.

In this volume about 160 papers from more than 20 countries are contained, representing an overall description of the state of the art in metal forming all over the world. Technologies, processes, materials and approaches are described and compared. New trends and interests are shown starting from the new advances in the modeling field, looking at process optimization strategies and considering issues as sustainability. Properties of final products are predicted with the aim to match requirements and specifications, determining appropriate sets of process parameters. Advanced materials such titanium and magnesium alloys are widely considered and investigated.

Finally the editors would like to express their gratitude to the reviewers of the submitted papers, as well as to the Members of the Scientific and Steering Committees of the Conference, for all their work and support, which were very helpful in determining the high scientific level of the Conference. We were pleased to welcome in Palermo every participant of the 15th Metal Forming Conference and we hope that the discussions and ideas sheared during the Conference together with this volume of proceedings will be effective starting points for further advances in the field of Metal Forming.

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